

**COMMUNICATIONS**  
(Revised September 2001)

**8380**

**RADIO COMMUNICATIONS POLICY**  
(Revised September 2001)

**8381**

Clear, reliable voice communications is important and cannot be overstated. Quality equipment, good training and disciplined use are essential. All aviation personnel will use Clear Text and standard Incident Command System (ICS) terminology.

For policies and procedures relating to telecommunications issues refer to the [8000 Telecommunications Handbook](#) and the [8100 Command and Control Handbook](#).

**AIR-TO-AIR COMMUNICATIONS**  
(Revised September 2001)

**8381.1**

In order to accomplish a safe, effective air tactical mission, there must be good communications at every stage of the operation. Therefore, all CDF aircraft must have a guard channel, a primary air-to-air channel, and backup air-to-air channel operable at the time of dispatch. In the event an airtanker or helicopter experiences in-flight radio trouble, the ATGS may approve their continued use with only one air-to-air channel. Such approval will only be given when it will not jeopardize safety or the effectiveness of the operation. Any aircraft experiencing total radio failure shall immediately return to base for repairs.

All airtankers and helicopters will report to the ATGS when they are three minutes from the scene. Unless they are immediately acknowledged, they will hold in orbit at this position until cleared to proceed to the incident.

No airtanker, helicopter, or other aircraft shall enter the incident area until communications have been established with the control aircraft, which may be a CDF ATGS, CDF intermittent ATGS, CDF helicopter, USFS lead plane, or USFS ATGS. If communications with all aircraft cannot be established, the air attack supervisor shall re-position all assigned aircraft with which he has contact to a safe orbit until contact is established with all aircraft.

Airtanker pilots making an initial attack on their own (no air tactical group supervisor immediately available) will continuously monitor the channels assigned by the ECC. Normally, they will change channels only when directed to do so by the ECC.

Air-to-air and air-to-ground channels are only to be used to communicate with aircraft, and shall not be used for communication between ground units.

## AIR TACTICS (“AIR-TO-AIR”) CHANNELS

8381.1.1

(Revised September 2001)

Air-to-air communications will be conducted on one of the six VHF-FM air tactical channels (3 CDF, 3 USFS), or one of 7 designated VHF-AM backup channels.

### Primary Air Tactics Channels:

The following channels are pre-assigned for use as air tactics channels in California. Utilization of additional air tactics/air-to-air channels is only authorized when assigned/approved by the region CC. Air-to-air and air tactics channels are only to be used by aircraft and shall not be used by ground-based radios. EXCEPTION: CDF helitack crews on CDF-only incidents may, with the approval of the ATGS, use Air Tactics 4, 5, or 6, as assigned, for necessary coordination with their own helicopter. No other ground units are authorized to use air tactics channels.

Channel Name		Frequency
Air Tactics 1	166.675 MHz	USFS zone dispatcher coordinates with CDF region CC before assigning.
Air Tactics 2	169.150 MHz	
Air Tactics 3	169.200 MHz	
Air Tactics 4	151.280 MHz	CDF region CC coordinates with USFS zone dispatcher before assigning.
Air Tactics 5	151.295 MHz	
Air Tactics 6	151.310 MHz	

## BACKUP AIR TACTICS CHANNELS

8381.1.2

(Revised September 2001)

Air Tactics 7 through 13 are to be used *only* as backup channels when 1) primary air tactics channels are already assigned, and 2) when multiple incidents require frequency separation, and 3) when their use would fall within the scope of “safe, efficient, and economical operation of aircraft and essential services” (Title 47, Code of Federal Regulations, paragraph 87.261). *These VHF-AM channels are shared with other aviation users.*

Requests for assignment of Air Tactics 7 through 13 should be placed with the local unit ECC, which in turn will place the request with the Region CC.

Channel Name	Frequency Area of Approved Use
Air Tactics 7 130.200 MHz	San Bernardino, Riverside, San Diego, Orange, Los Angeles counties
Air Tactics 8 131.475 MHz	Madera, Mariposa, Merced, Fresno, Kings, Tulare, Kern counties
Air Tactics 9 129.075 MHz	Santa Clara, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura counties
Air Tactics 10 129.775 MHz	Nevada, Yuba, Placer, Amador, El Dorado, Tuolumne, Calaveras, and Sutter counties
Air Tactics 11 129.775 MHz	Shasta, Trinity, Tehama, Glenn, Butte, Plumas, Sierra counties
Air Tactics 12 131.550 MHz	Siskiyou, Lassen, Modoc counties
Air Tactics 13 131.600 MHz	Humboldt, Del Norte, Mendocino, Sonoma, Lake counties

## ADDITIONAL AIR TACTICS FREQUENCIES

8381.2

(Revised September 2001)

CDF aircraft may utilize the following frequencies as channels for air tactics communications:

- **118.950 MHz** - USFS Air Tactics \*
- **119.950 MHz** - USFS Heliport Air Traffic Control \*
- **122.850 MHz** - May be assigned as backup air-to-air frequency, but is used by general aviation aircraft for routine traffic. Normally, however, it is less congested than 122.900 MHz.
- **122.900 MHz** - Backup air-to-air frequency. Used by general aviation aircraft for routine traffic. Very congested and may be unusable in high-density air traffic areas.
- **122.925 MHz** - Backup air-to-air frequency. Also used by air attack bases for local communications with inbound, outbound, and reloading aircraft. Assigned for use by all natural resource protection agencies. This frequency has become the known contact frequency for use by news media, EMS, etc.

- **122.950** – Air-to-air operations
- **122.975 MHz** - FAA Air-to-Air and Air-to-Ground. Use for helicopter air-to-air operations
- **123.025** – helicopter air-to-air operations
- **123.050 MHz** - FAA Heliport Air Traffic Control. This is commonly used as a “Unicom” frequency and could be congested. Use for helicopter air-to-air operations and helibase operations.
- **123.075** – helicopter air –to-air operations
- **135.975** – helicopter air-to-air initial attack operations, California only.

\*CDF to coordinate with the appropriate USFS dispatcher before assigning

Note: Airbase frequency 123.975 MHz is not to be used as a tactical frequency.

## **AIR-TO-ECC AND FLIGHT FOLLOWING**

**8381.3**

(Revised September 2001)

To Be Written

## **AIR-TO-GROUND COMMUNICATIONS**

**8381.4**

(Revised September 2001)

Upon arrival over a fire, the air tactical group supervisor (ATGS) will handle all air-to-ground communications on the channel assigned by the ECC. In some situations, no ATGS will be available. Airtankers and helicopters must then communicate directly with ground units on the channel assigned by the ECC.

The best communication with ground units is achieved when the aircraft is not directly above the ground unit.

## **AIR-TO-GROUND CHANNELS**

**8381.5**

(Revised September 2001)

Normally, incident ground-to-air transmitting is restricted to the incident commander and/or operations section chief and helitack crews. Individual overhead, fire crews, engines and dozers needing air support should contact IC, Ops or other appropriate line officer on the assigned ground tactical net.

BLM, USFS and CDF have pooled the following frequencies for use by aircraft in supporting ground operations.

<u>Channel</u>	<u>Frequency</u>
CDF Guard 2 (Air to Ground)	151.220 MHz
USFS Air-to-Ground	170.000 MHz
BLM Air-to-Ground	167.950 MHz

The three listed frequencies are the only ones dedicated to air-to-ground communications.

Other frequencies controlled by these agencies may be assigned by an ECC or dispatch office, as air-to-ground net on a particular incident. The following tables list other licensed CDF frequencies that may be assigned:

#### **CDF TACTICAL CHANNELS**

Channel Name	Frequency	Channel Name	Frequency
TAC-01	151.145*	TAC-13	151.475*
TAC-02	151.160	TAC-14	159.225
TAC-03	151.175	TAC-15	159.270
TAC-04	151.190	TAC-16	159.285
TAC-05	151.250	TAC-17	159.315
TAC-06	151.325	TAC-18	159.345
TAC-07	151.340	TAC-19	159.360
TAC-08	151.370	TAC-20	159.375
TAC-09	151.385	TAC-21	159.390
TAC-10	151.400	TAC-22	159.405
TAC-11	151.445	TAC-23	159.450
TAC-12	151.460		

\*Frequencies 151.145 and 151.475 are not yet licensed for statewide use.

**STATEWIDE NETS**

Channel	Car-to-Car Frequency	Repeater Input Frequency
Command-1	151.355	159.300
Command-2	151.265	159.330
California Calling Net (Travel Net)	169.125	168.325

**NORTHERN REGION LOCAL NETS**

Channel	Car-to-Car Frequency	Repeater Input Frequency
Humboldt-Del Norte	151.250	159.405
Mendocino	151.190	159.270
Lake-Napa	151.385	159.315
Sonoma	151.460	159.390
San Mateo-Santa Cruz	151.370	159.285
Santa Clara	151.445	159.345
Nevada-Yuba-Placer	151.325	159.360
Butte	151.400	159.375
Tehama-Glenn	151.370	159.285
Shasta-Trinity	151.160	159.270
Lassen-Modoc	151.250	159.405
Siskiyou	151.325	159.360

**SOUTHERN REGION LOCAL NETS**

Channel	Car-to-Car Frequency	Repeater Input Frequency
San Luis Obispo	151.325	159.315
San Bernardino, Local-1	151.445	159.390
San Bernardino, Local-2	151.325	159.315
San Bernardino, Local-3	151.250	159.405
Riverside, Local-1	151.385	159.360
Riverside, Local-2	151.175	159.285
Riverside, Local-3	151.130	158.925
San Diego	151.190	159.225
Madera-Mariposa-Merced	151.460	159.390
Fresno-Kings, Local-1	151.385	159.270
Fresno-Kings, Local-2	151.160	159.360
Tulare	151.190	159.225
Amador-El Dorado	151.190	159.225
Tuolumne-Calaveras	151.175	159.450
San Benito-Monterey	151.250	159.405

**IN-FLIGHT EMERGENCIES****8381.6****(Revised September 2001)**

If the pilot-in-command of any aircraft declares in-flight emergency (MAYDAY), all other radio communications on that channel will cease until the pilot states his/her emergency and receives appropriate assistance.

## **MILITARY AND CALL-WHEN-NEEDED (CWN) AIRCRAFT**

**8381.7**

**(Revised September 2001)**

If military and/or CWN aircraft are assigned to a mission, they must be instructed to continuously monitor:

The assigned CDF (or USFS) air tactics channel, and Air Guard Channel 168.625 MHz., and any other assigned backup frequency.

## **MALFUNCTIONING RADIOS**

**8381.8**

**(Revised September 2001)**

A malfunctioning radio must be reported immediately to ECC. CDF aircraft or aircraft under CDF control should not be dispatched without the ability to transmit and receive on all radios.

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